

A Study of the Hydrogen Exchange Reaction With the  
Aid of Liquid Hydrogen Fluoride, by Ya. M.  
Varshavskiy, M. G. Loshkin, A. I. Shatenshtein,  
16 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, 1957, pp  
1377-1386.

ABC Tr 3213  
SLA 61-12633

Sci - Chem

May 58

64, 817

Phenomenon of Photographic Reversal. Effect of Processing Upon the Formation of the Image With Simultaneous Exposure to Actinic and Bleaching Light, by E. A. Galashin, V. M. Tatevskiy, 4 pp.

RUSSIAN, per, Zhurnal Fiz Khim, Vol XXXI, No 6, 1957, pp 1426-1428.

LC or SLA 59-17267

Sci - Physics  
Dec 59  
Vol 2, No 7

*NLL 17.2500*  
*102,085*

CIA USE ONLY -- CIA/FDD XX-737

Tetramethylethylene -- A New Inhibitor and Initiator  
for the Cracking of Paraffinic Hydrocarbons, by  
A. D. Stepukhovich, et al.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, No 7, 1957,  
pp 1437-1444.

ATS RJ-1178

Sci - Phys, Chem  
Apr 60

114,543

Calculation of the Isotopic Effect in the Vapor  
Pressure of Water and Methane, by G. G. Deviatykh,  
5 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, 1957,  
pp 1445-1447.

AEC Tr-4442

Sci - Phys, Chem  
Oct 61

171, 212

List 60

Kinetics of the Hydrogenation of Butylene on a  
Chromium-Aluminum Catalyst, by G. D. Lbarskiy,  
S. K. Yermakova, S. Ya. Pshchetskiy, 12 pp.

RUSSIAN, Per, Zhur Fiz Khim. 1957, Vol XXXI, No 7,  
pp 1492-1500.

SLA 59-15484

Sci  
Oct 59  
Vol 2, No 3

99, 912

Computation of Smoothing in the Electrochemical  
Polishing of Metals, by S. I. Krichner, 12 pr.

RUSSIAN. per, Zhur Fiz Khim, Vol XXXI, 1957, pp  
1593-1599.

SLA R-3125

Sci

Jul 59

92,720

Spectrophotometric Study of the Reaction Between  
Sodium 1,8-Dioxy-2-(2'-Oxyazobenzene)-3,6-Naphthalene  
Disulphonate and Magnesium Ions, by V. R. Tobolsky,  
G. G. Lomskina, 13 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, No 7, 1957,  
pp 1600-1605. 2023607

AEC ANRS Tr-21

Sci - Phys, Chem  
Dec 61

NOT RECORDED

177, 441

Turbulent Diffusion and Combustion of Atomized  
Fuel in a Stream, by V. Ya. Banevich.

RUSSIAN, par, Zhur Fiz Khim, Vol XXXI, No 7,  
1957, pp 1619-1626.

Assoc Tech Serv RJ-1417  
" " " 60K23R

Sci - Chem

Apr 59

85,301



Electrical Theory of OzonizersII. Theory of the  
Dynamic Characteristics of Ozonizers, by Yu.  
Fmel'yanov, Yu. Filippov.

RUSSIAN, per, Zhur Fiz Khim, Vol XXII, No 7,  
1957, XX pp 1628-1635.

CSIRO 4008

Sci - Electron  
Aug 62

*211,337*

Approximate Solution Of Certain Higher Degree  
Equations Arising In Calculations Of Chemical  
Equilibria 1. Nomographic Method. by A.V.Voronov.

RUSSIAN, per, Zhurnal Fizicheskoi Khimii, Vol XXXI,  
No 7, 1957, pp 1643-1649.

CSIRO

Oct. 62

Measurement of the Moisture Permeability of  
Films of Synthetic Materials Using Water Labeled  
With Tritium, by E. E. Finkel, 8 pp.

RUSSIAN, *Tr. Zhur Fiz Khim*, Vol XXXI, 1957,  
pp 1650-1655.

AEC Tr 3310

Sci - Chem

Sep 58

73, 755

Studies of the Dehydrogenation of Butane-Butylene  
Mixtures by Means of Radioactive Carbon  $C^{14}$ , by  
G. V. Ismagilovs, A. A. Balandis, O. K. Bogdanova,  
M. B. Meyman, E. I. Popov.

RUSSIAN, per, Zhur Fiz Khim, Vol XXII, 1957, pp  
1667, 1668.

Assoc Tech Ws 8v  
85K20R

79,960

Sci - Chem  
Feb 59

019/FOU XX-584

11 759

GE-1

VYAKHIREV D. A., BRUK A. I.

The influence of experimental parameters on the chromatographic separation of substances in the gas or vapor phase

Der Einfluss von Versuchsparametern auf die chromatographische Trennung von Stoffen in der Gas- oder Dampfphase

Zhur. Fiz. Khim., 31, No. 8, 1713-1720 (1957) - German

E u r a t o m

Investigation of the Connection Between the  
Electroconductivity and the Adsorption Properties  
of Zinc Oxides, by I. A. Myasnikov, 19 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, 1957,  
pp 1721-1731.

Chem  
Sci -/Phys

ABC TR 3301  
SLA R-5061 + R-5081

3op 58

79, 780

RUSSIAN to FRENCH  
073 TT-62-28168

On the Tautomerism of Some Heterocyclic  
Derivatives. Part IV. The Spectra and  
Structure of Benzenesulfonamides and  
Sulfanilamides of the Thiazole and  
Thiadiazole Series, by Yu. N. Sheinker.  
RUSSIAN, per, Zhurnal Fizicheskoi Khimii,  
Vol 31, No 8, 1957, pp 1745-1755.  
NTC-70-13086-07C

Feb 72

On the Relation Between the Dipole Moment and  
Surface Tension, by O. A. Onipov, I. K. Shelomov,  
10 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, No 8, 1957,  
pp 1757-1762.

SLA R-3126

*Horris D. Friedman*

Sci

Jul 59

*91,339*



Ostroumov, V. V.  
MECHANICAL STRESSES IN ELECTROLYTIC DE-  
POSITS OF PALLADIUM. Jan 60.  
Order from MT MT Trans-59

Trans. of Zh[urn]al Fiz[icheskoi] Khim[ii] (USSR)  
1957, v. 31, no. 8, p. 1812-1819.

DESCRIPTORS: \*Palladium, Electrodeposition, Metal  
coatings, Stresses

MT-59

(Chemistry--Physical, TT, v. 6, no. 5)

61-22855

I. Ostroumov, V. V.  
II. MT Trans-59  
III. Tollemache, M. de O.  
(Ot. Brit.)

180563

Office of Technical Services

The Kinetics of the Thermal Activation and Deactivation of Platinum Catalysts, by A. A. Logatkin, et al.

RUSSIAN, per, Zhur Fiz Khim, Vol III, No 8, 1957, pp 1820-1824.

REXX MT Trans-60

Sci  
Jan 62

178, 471

S-150/50

(NY-37134)

Measuring the Melting Points of Aluminum and  
Copper at Pressures up to 18,000 Kilograms  
per Centimeter, by M. G. Gonikberg, G. P.  
Shakhovskoy, V. P. Butuzov, 7 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXII, No 8,  
1957, pp 1839-1842.

JPRS 2541

Sci - Phys  
Apr 60

114, 713

The Physical Chemistry of Concentrated Ozone.  
Part II. Investigation of the Synthesis of  
the Higher Peroxide of Hydrogen  $H_2O_4$  in the  
Reaction of Concentrated Ozone With Atomic  
Hydrogen, by N. I. Kobozov, et al.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, No 8,  
1957, pp 1843-1850.

Navy Tr 1942/T-32

Sci - Chemistry

Dec 58

(Possibly RUBR/TCL-109)

Coop Tr Sch 564

78,024

S-75/60

(NY-3551).

~~SECRET~~

A Chemical Method for the Separation of Boron Isotopes, by G. M. Pannchenkov, V. D. Moiseyev, A. V. Makarov, 16 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, No 8, 1957, pp 1851-1860.

JPRS 2519

Sci - Chem  
Apr 60

114,715  
AEC - 4644

TT-62-29190

Franklin, A.N.  
ETUDE DE MECANISME DE LA SEPARATION PAR  
ELECTROLYSE DE L'HYDROGENE PAR INTRODUC-  
TION A LA SURFACE DE L'ELECTRODE, DE  
QUANTITES SUPPLEMENTAIRES D'HYDROGENE  
ATOMIQUE (Ob Issledovanii Mekhanizma Elektroliti-  
cheskogo Vydeleniya Vodoroda Metodom Vvedeniya  
Dopolnitel'nykh Kolichestv Atomarnogo Vodoroda na  
Poverkhnost' Elektroda) (Investigation of Electrolytic  
Hydrogen Evolution by the Addition of Atomic Hydrogen  
to the Electrode Surface). 31p. (foreign text partially  
included) 18 refs. CNRS-VIII bis 790.  
Order from OTS, ETC or CNRS \$1.15 TT-62-29190

Trans. in French of Zhurnal Fizicheskoi Khimii (USSR)  
1957, v. 31, no. 8, p. 1875-1890.

DESCRIPTORS: \*Electrolysis, Electrodes, \*Hydrogen,  
Surfaces, Atoms, Separation,

(Chemistry--Physical, TT, v. 11, no. 8)

I. Franklin, A.N.  
II. CNRS-VIII bis 790  
III. Centre National de la Recher-  
che Scientifique, Paris

Office of Technical Services  
European Translations Centre

Application de La Mesure De La Micro-Durete A  
L'Etude Des Diagrammes D'Equilibre Binaires Et  
Ternaires Des Systemes Metalliques. (Application  
of the Microhardness Measurement to the Study of  
the Diagrams of Binary and Ternary Equilibria of  
Metallic Systems), by V. M. Glasov, V. N.  
Vigdorovich (Vigdorovitch), G. A. Korolkov, 13 pp.

FRENCH from RUSSIAN, per, Zhur Fiz Khim, Vol XXXI,  
1957, pp 1891-1897.

Reverse Translation  
AEC/CEA-Tr-R510

Relation of Zero Charge Points of Certain Metals to  
pH, by V. I. Heifets, et al. UNCLASSIFIED

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, No 9, 1957,  
pp 1992-1999.

\*DSIR/TCL 110

Sci - Phys  
Nov 58



Study of the Relation Between the Electrical Conductivity and the Adsorptional and Sensitizing Properties of Zinc Oxide. II. Electronic Processes in Zinc Oxide in Gas Phase Catalysis and Photocatalysis, by I. A. Myasnikov, 13 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, No 9, 1957, pp 2005-2011.

ABX NP 171

Sci - Chem

Jan 59

79,763

Antipin, I. N. and Dadyrev, V. K.  
THE BEHAVIOR OF THE CARBON ANODE IN THE  
ELECTROLYSIS OF CRYOLITE-ALUMINA MELTS.  
[1962] 10p.

Order from K-H \$12.50

K-H 8024 d

Trans. of Zhurnal Fiz[icheskoi] Khim[ii] (USSR)  
1957, v. 31, [no. 9] p. 2032-2035.

DESCRIPTORS: \*Cryolite, \*Aluminum compounds,  
Oxides, Fused materials, Electrolysis, \*Electro-  
chemistry, \*Anodes (Electrolytic cell), Carbon.

(Chemistry--Physical, T'I, v. 9, no. 11)

63-12927

I. Antipin, I. N.  
II. Dadyrev, V. K.  
III. K-H-8024-d  
IV. Kresge-Hooker Science  
Library Associates,  
Detroit, Mich.

TT-64-30129

Office of Technical Services

Nature of the Chemical Bond in Thiocyanate Complexes of 1st Metals, by Z. V. Zvonkova.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, No 9, 1957, pp 2074-2077.

DSIR LLU RTS 1430

Sci - Chem

Aug 60

122,570

61-23774

Akhumov, E. I. and Rozen, B. Ya.  
SUR LES RÈGLES D'ADSORPTION DU BROME ET  
DE L'IODE PAR LES ADSORBANTS MINÉRAUX EN  
PRÉSENCE DES CHLORURES ET SULFATES DE  
SODIUM ET POTASSIUM [O Zakonomernostyakh  
Adsorbtsii Broma i Yoda Mineral'nykh Adsorbentami v  
Prisutstvii Khloridov i Sulfatov Natriya i Kaliya] [Em-  
pirical Correlations in the Adsorption of Bromine and  
Iodine by Mineral Adsorbents in the Presence of the  
Chlorides and Sulfates of Sodium and Potassium] tr. by  
Kefeli. 18 Jan 60 [6]p. 3 refs. CEA Trans. no. R 806  
(text in French).  
Order from OTS or SLA \$1.10

61-23774

Trans. in French of Zhurnal Fizicheskoi Khimii  
(USSR) 1958, v. 32, no. 9, p. 2094-2096.

DESCRIPTORS: \*Iodine, \*Bromine, Adsorption, Gels,  
\*Catalysts, \*Alumina-silica catalysts, Aluminum com-  
pounds, Oxides, \*Adsorbents, Chlorides, Sulfates.

(Chemistry--Physical, TT, v. 6, no. 7) (over)

- I. Akhumov, E. I.
- II. Rozen, B. Ya.
- III. CEA-tr-R806
- IV. Commissariat à l'Énergie  
Atomique (France)

Office of Technical Services

Heat of Adsorption of N-Hexane and N-Heptane  
Vapors on Silica Gels, by A. A. Isirikyan,  
A. V. Kisilev, 12 p.

RUSSIAN, per, Zhur Fiz Khim, 1957, Vol XXI,  
No 9, pp 2127-2137.

SLA 60-10584

Sci  
May 60  
Vol 3, No 4

116, 788

Methods of Sealing Samples When Studying the  
Kinetics of Catalytic Processes by the Diaphragm  
Method, by G. P. Korneichuk, N. A. Stukanovskaya,

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, No 9,  
1957, pp 2138, 2139.

ATB RJ-2034

Sci - Chem  
Dec 59

103978

Work With Alkali Metals, by P. P. Pugachevich, Gyp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, 1957, pp  
2140-2142.

Australian AEC/E-27

Oct 59

Mise en evidence du radical hydroxyle libre  
per les spectres d'absorption des produits  
secondaires des reactions photochimiques  
en solution aqueuse. by G. A. Korshunovskii,  
9 pp.

RUSSIAN to FRENCH, per, ZH. Fiz.Khim., SSSR.,  
Vol 31, No 10 , 1957., 90691344

CEA R-1653  
Reverse Translation

Sci  
Nov 62



The Chemical Structure of the Surface of Quartz  
and of Silica Gel and Its Hydration, by S. P.  
Zhdanov, A. V. Kiselev.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, No 10,  
1957, pp 2213-2223.

ATS RJ-1276

Sci - Phys, Chem  
Apr 60

114,568

Mechanism of Metallic Corrosion in Narrow Crevices  
and Slits. III. Corrosion of Aluminium and Some  
of Its Alloys, by I. L. Rosenfel'd, et al.  
UNCLASSIFIED

RUSSIAN, per, Zhur Fis Khim, Vol XXII, No 10,  
1957, pp 2328-2336.

Co-op Tr Sch 598

Sci - Min/Met

Mar 99

82,417

Belaschenko, D. K.  
VISCIOUS AND ELECTRICAL PROPERTIES OF  
LIQUID BINARY ALLOYS AND THEIR RELATION  
TO THE STRUCTURE OF THE LIQUID. [1960] 18p.  
(8 figs. omitted) 9 refs.  
Order from LC or SLA ml\$2. 40, ph\$3. 30 61-10271

Trans. of [Zhurnal Fizicheskoy Khimii (USSR) 1957  
v. 31, no. 10, p. 2269-2277.

The hysteresis of the viscosity and the electrical conductivity of liquid alloys in the Cd-Sb, Pb-Tl and Bi-Tl systems was found. The alloys of the Sb-Sn and Cd-Cu do not develop hysteresis of these properties. A considerable influence of ordering on the properties of the systems was found. A tendency towards the appearance of anomalies according to the degree of removal from the ideal state was noticed. (The sequence is Pb-Tl Sb-Sn Fe-Ni Bi-Tl Cd-Sb Cd-Cu). (Author)

(Chemistry--Physical, TT, v. 5, no. 4)

61-10271

1. Alloys--Electrical properties
2. Alloys--Viscosity
1. Belaschenko, D. K.

143/89

Office of Technical Services

SOME PROBLEMS IN THE THEORY OF ELECTRO-DEPOSITION  
OF ALLOYS IV. Oscillographic Study of Cathode  
Potential in the Process of Alloy Deposition, by  
Yu. M. Polakarov, K. M. Gornunova, 13 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, No 10, 1957,  
pp 2281-2286.

HTA-11911-112  
SLA 59-19566

Sci  
Jun 60  
Vol III, No 5

61-20969/19,057  
ATS-RJ-2707

A Sensitive Method for the Determination of  
Diffusion Coefficients, by V. A. Geodakyan,  
A. A. Zhukhovitsky, 10 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, 1957,  
pp 2295-2301. 9207632

AEC-Tr-5663

Sci - Phys  
Jun 63

231,876

On the Dissociation Energies of Molecules of the  
Oxides of the Alkaline Earth Elements, by L. V.  
Veita, L. V. Gurvich, 15 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, 1957,  
pp 2306-2309. 9093622

ABC URL Tr-708

Sci - Phys, Chem  
Dec 61.

177,442

The Diffusion of Phosphorus and Calcium in  
Melts of  $\text{CaO-Al}_2\text{O}_3\text{-SiO}_2$  and  $\text{CaO-P}_2\text{O}_5$ , by O. A.  
Yesin, Ye. S. Vorontsov, S. K. Chukmarev,  
10 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, No 10,  
1957, pp 2322-2327.

SLA 60-17711

Sci

OTS, Vol IV, No 3

129,410

Sep 60

Mechanism of Corrosion of Metals in  
Narrow Cracks and Crevices. IV. Corrosion  
of Aluminum and Some of Its Alloys, by  
I. L. Rozenfel'd, I. K. Marshakov.  
RUSSIAN, per, Zhur Fiz Khim, Vol XXXI,  
1957, pp 2328-2335. P500017667  
Dept of Navy/ONI Tr 2242

Sci - Materials

Feb 67

~~CONFIDENTIAL~~

31R 822



On the Problem of Crystallization of Ultra-Pure  
Substances, by P. G. Vadilo, *et al.*

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, No 10, 1957,  
pp 2375-2376. *7876801*

Navy Tr 2582/NRL 80

Sci - Chemistry  
Jul 60

*120,765*

Origin and Meaning of the Changing Energetic  
Characteristics of the Catalytic Process, by  
S. Z. Roginskiy, 10pp.

RUSSIAN, per, Zhur Fiz Khim, Vol. XXXI, No 11,  
1957, pp 2381-2390.

CSIRO  
SEA R-5109

Sci - Chem  
Apr 62

190,468

RUSSIAN & FRENCH  
OTS 77-62-28189

The Mechanism of Catalysis. Part 2. The  
Mixed Heterogeneous-Chain Mechanism of Catalysis  
by N. I. Kobozov,

RUSSIAN, per, Zhur Pis Khim, Vol XXXI, No 11,  
1957, pp 2391-2399.

Assoc Tech Serv RJ-1419  
20K25R

Sci - Chem

Apr 59

85,304

Kravtsov, V. I. and Loginova, I. S.  
THE DISSOLUTION MECHANISM OF CADMIUM  
AND CADMIUM AMALGAM IN ACID SOLUTIONS  
(O Mekhanizme Rastvoreniya Kadmiya i Amalgamy  
Kadmiya v Rastvore Kislot). Oct 60 [14]p. 13 refs.  
RTS 171f.  
Order from LC or SLA m\$2. 40, ph\$3. 30 61-13498

Trans. of Zhurnal Fizicheskoy Khimii (USSR) 1957,  
v. 31, no. 11, p. 2438-2444.

The self-dissolution and the anodic dissolution of  
cadmium and of amalgamated cadmium in sulphuric  
acid solutions are shown to proceed at practically the  
equilibrium potentials of the corresponding electrodes.  
A method is indicated for determining, from the  
-log  $\alpha\text{CdSO}_4$  curves, the effective cadmium sulphate  
concentration at the surface of a cadmium (or amal-  
gamated cadmium) electrode dissolving in sulphuric  
acid. The activity coefficient of the cadmium ion in  
solutions containing an excess of sulphuric acid  
(Chemistry-Physical, TT. v. 5, no. 5) (over)

61-13498

- I. Cadmium--Chemical reactions
- I. Kravtsov, V. I.
- II. Loginova, I. S.
- III. RTS-171f
- IV. Department of Scientific and Industrial Research (Gt. Brit.)

147,012

Office of Technical Services

The Structure of Cu-Si Alloys and Their  
Catalytic Activity in the Reaction With Ethyl  
Chloride, by V. D. Krylov, Yu. N. Efremov.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, No 11,  
1957, pp 2522-2525.

Assoc Tech Serv RJ-1395  
" " " 56X24R

Sci - Chem

Apr 59

85, 283

The Catalytic Effect of Solid Products in the  
Reduction of Nickel and Copper Oxides by Hydrogen,  
by V. V. Boldyrev, A. S. Ermolayev.

RUSSIAN, per, Zhur Fiz Khim, Vol. XXXI, No 11,  
1957, pp 2562-2570.

Assoc Tech Serv RJ-1393  
" " " 14K25R

Sci - Chem

Apr 59

85,282

Method for Polarization Measurements in Poorly  
Conducting Solutions, by V. A. Gus'kov, M. Ya.  
Fioshin.

RUSSIAN, per, Zhur Fiz Khim. Vol XXXI, No 11, 1957,  
pp 2575-2576.

MIT Lincoln Lab

Sci - Phys

Apr 58

61, 494

An Apparatus for the Joint Determination of Viscosity,  
Density and the Fusion-Solidification Temperatures,  
by N. S. Bubyreva, B. I. Markin, B. P. Dindas,  
Yu. A. Silkin, K. V. Chmutov, 5 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, 1957,  
pp 2580-2583.

AEC Tr 3539

Sci - Phys  
Mar 59

82,889



61-23743

Mindovich, E. Ya.  
DISCUSSION SUR LA REPARTITION D'UNE SUB-  
STANCE ENTRE LES DEUX PHASES NON MISCIBLES  
[ON THE DISTRIBUTION OF MATTER BETWEEN  
TWO IMMISCIBLE PHASES] tr. by Schkaff. Reply to  
the paper by F. S. Kulikov. 15 Dec 59 [11]p. 13 refs.  
CEA Trans. no. R 779 (text in French).  
Order from OTS or SLA \$1.60

61-23743

Trans. in French of Zhurnal Fizicheskoi Khimii  
(USSR) 1957, v. 31, no. 12, p. 2759. (Original  
article pub. in Zhurnal Fizicheskoi Khimii (USSR) 1954,  
v. 28, p. 2232ff).

DESCRIPTORS: Chemical equilibrium, \*Picric acid,  
\*Water, \*Nitrobenzenes, Benzenes.

(See also 61-19600)

(Chemistry--Physical, TT, v. 6, no. 7)

- I. Mindovich, E. Ya.
- II. Kulikov, F. S.
- III. Title: Répartition...
- IV. CEA-tr-R779
- V. Commissariat à  
l'Énergie Atomique  
(France)

Office of Technical Services

The Formation of Hydrogen Peroxide during  
Oxidation of Formaldehyde, by A. M. Markovich,  
L. F. Filippova. UNCL

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, 1957,  
pp 2649-2655.

DSIR LLJ M.1282

(loan)

Sci - Chem  
May 60

111,136

On the Tautomerism of Certain Derivative  
Heterocyclic Compounds. Part V. Absorption  
Spectra and Structure of Certain Sulfanil-  
amides, by Yu. N. Sheinker.  
RUSSIAN, per, Zhurnal Fizicheskoi Khimii,  
Vol 31, No 12, 1957, pp 2656-2662.  
NTC-70-13189-07C

Feb 72

61-20970

Polukarov, Yu. and Gorbunova, K. M.  
SOME PROBLEMS IN THE THEORY OF THE  
ELECTRODEPOSITION OF ALLOYS. V. OSCILLO-  
GRAPHIC INVESTIGATION OF THE CATHODE  
POTENTIAL IN THE PROCESS OF DEPOSITION OF  
AN ALLOY (THE SYSTEMS COPPER-ZINC, COPPER-  
LEAD, AND NICKEL-COBALT). [1961] 7p. 8 refs.  
Order from OTS or SLA \$1.10 61-20970

Trans. of Zhurnal Fizicheskoi Khimii (USSR)  
1957, v. 31 no. 12, p. 2682-2689.  
Another trans. is available from ATS as ATS-00M41R  
[1960] 7p.

DESCRIPTORS: \*Alloys, \*Electrodeposition, Copper  
alloys, Cobalt alloys, Nickel alloys, Zinc alloys,  
Lead alloys.

(Chemistry--Physical, TT, v. 7, no. 5) (over)

- I. Polukarov, Yu. M.
- II. Gorbunova, K. M.
- III. Title: Oscillographic ...

ATS-00M41R

ATS-RJ-2708

Office of Technical Services

Study of High-Molecular Organosilicon Compounds  
by the Methods of Infrared Spectroscopy, by  
A. P. Kreshkov, Yu. Ya. Mikhaylenko, Ye. A.  
Kirichenko, 15 p.

RUSSIAN, per, Zhur Fiz Khimii, 1957, Vol XXXI,  
No 12, pp 2690-2695.

SLA 59-17093

Sci  
Jan 60  
Vol 2, No 8

~~SECRET~~  
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p 1957, pp 2706-2710.

CSIRO

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Lyzlov, Yu. V., Mechkovskaya, T. A., and  
Smartsev, A. G.  
THE INFLUENCE OF GELATIN ON THE FORMA-  
TION OF ELECTROLYTIC DEPOSITS OF COPPER  
(Vliyaniye Zhelatin na Obrazovanie Elektroliticheskikh  
Osazhkov Medni) Sep 61 [11]p. 18 refs. RTS 1854  
Order from OLS or SLA \$1.60

61-28161

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1957,  
v. 31, no. 4, p. 2724-2724.

DESCRIPTORS: \*Copper, \*Deposits, \*Electrolytic  
cells, \*Cathodes (Electrolytic cell), \*Gelatin, Elec-  
trolysis

With the aid of a microscope the surface of a micro-  
cathode was observed during the deposition of copper  
from an acid copper bath which contained gelatin as a  
brightener. The existence of a critical current den-  
(Chemistry--Physical, TT, v. 6, no. 12) (over)

61-28161

I. Lyzlov, Yu. V.  
II. Mechkovskaya, T. A.  
III. Smartsev, A. G.  
IV. RTS-1854  
V. Department of Scientific  
and Industrial Research  
(Gt. Brit.)

Office of Technical Services

Mecanismes De La Corrosion Des Metaux Dans Des Fentes Etroites. IV. Corrosion Des Aciers Inoxydables. (Mechanism of the Corrosion of Metals in Narrow Fissures. IV. Corrosion of Stainless Steel), by I. K. Marchakov, I. I. Rozenfel'd (Rosenfeld), 15 pp.

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Reverse Translation  
AEC/CEA-Tr-R609



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\*ANC

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Shlygin. UNCL

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DSIR LLU RTS 1177

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ORDER FROM OTS OF SCA \$1.60

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AEC 3408

ATS/RT-1613

Sci - Phys

OSIR LLU RTS 1010

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\*DSIR/TCL 115

Sci - Chem  
Mar 59

\*DSIR/TCL 115

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AMC IS-Tr-64

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Sept 67

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9 pp.

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NIH 3-55-62

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Jun 62

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GF-4

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Theory of particle precipitation from a gas flow on an isolated cylinder as a function of the filtration process of aerosols

Theorie des Niederschlagens von Teilchen aus der Gasströmung auf einem isolierten Zylinder in Abhängigkeit vom Filtrationsprozess von Aerosolen

Zhur. Fiz. Khim., 34 282-290 (1958)

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E u r a t o m

Theory of the Separation of a Gaseous Mixture  
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DSIR LRU RTS 1038

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Sci - Phys  
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\*DSIR/TCL 115

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THE KINETICS OF THE MECHANICAL DESTRU-  
TION OF HIGH POLYMERS. [1960] 13p. 26 refs.  
Order from LC or SLA m\$2.40, ph\$3.30 60-16898

Trans. of Zhurnal Fizicheskoy Khimii (USSR) 1958,  
v. 32 (no. 2) p. 433-441.

It is shown, that the rate and the limit of mechanical  
destruction of amorphous polymers depend on their  
chemical nature. An equation of destruction of  
amorphous polymers is given. Indicators of destruc-  
tion degree, giving a many-sided process description,  
are proposed. (Author)

(Chemistry--Organic, TT, v. 5, no. 3)

60-16898

1. Polymers--Physical factors
2. Polymers--Decomposition
1. Baramboym, N. K.

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AEC Tr-3679

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(12s. 6s.)

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AN INVESTIGATION OF THE CHLOROSULPHONATION REACTION. II. KINETICS OF THE CHLORINATION OF p-PHENYLURETHANESULPHONIC ACID BY CHLOROSULPHONIC ACID (Issledovaniye Reaktsii Khlorosul'irovaniya. II. Kinetika Khlorirovaniya p-Feniluretilansul'fokislotoy Khlorosul'fonovoy Kislotoy).

Jan 61 [14]p. 2 refs. RTS 1732.

Order from LC or SLA m\$2.40, ph\$3.30 61-15640

Trans. of Zhurnal Fizicheskoy Khimii (USSR) 1958, v. 32, no. 3, p. 620-627.

The relationship between the absolute value of the acidity function of the medium and the velocity constant for the chlorination of p-phenylurethanesulphonic acid by chlorosulphonic acid has been determined for different temperatures. The variation of the velocity constant with initial concentration of p-phenylurethanesulphonic acid is discussed, and a quantitative theoretical treatment is given. (Author)

(Chemistry--Physical, TT, v. 5, no. 7)

61-15640

1. Sulfonic acids--  
Halogenation
2. Chlorosulfonic acid--  
Chemical reactions
- I. Pal'm, V. A.
- II. Title: Kinetics...
- III. RTS-1732
- IV. Department of Scientific  
and Industrial Research  
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Theory of the Chromatographic Separation of  
Isotopes, by S. E. Bresler.  
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AEC HLM-1333

Sci/Physics  
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The Dependence of the Potential of a Carbon  
Reference Electrode on the Oxygen Content of Molten  
Cryolite, by L. N. Antipin.

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*226 280*  
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*SLH 66-17717*

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SLA 60-14116

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Polikarov, Yu. M. and Gorbunova, K. M.  
 SOME PROBLEMS CONCERNING THE THEORY OF  
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 SYSTEMS DURING THE ELECTRO-DECOMPOSITION OF  
 ALLOYS [Nekotorye Voprosy Teorii Elektroosazhdeniya  
 Splavov. VI. O Mekhanizme Obrazovaniya Peresysh-  
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 61-20971  
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 v. 32, no. 4, p. 762-768.  
 Another translation is available from ATS \$13.75 as  
 ATS-81M44R [1960] 8p.

DESCRIPTORS: \*Alloys, \*Electrodeposition, Crystalli-  
 zation, Decomposition.

(Chemistry--Physical, TT, v. 6, no. 6)

61-22857

I. Polikarov, Yu. M.  
 II. Gorbunova, K. M.  
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 (Gt. Brit.)

ATS-81M44R  
 ATS-85-2709  
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Office of Technical Services

The Partial Derivatives of the Fundamental  
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NASA TT F-11,089

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ATS RJ-2061

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MT-62 104,058

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NRCC TT-814

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DSIR LLJ RTS 1092

(12a. 6a.)

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ATS RJ-2060

Sci - Chem  
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8p.

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1958, v. 32, no. 4, p. 841-847.

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properties
2. Electrical conductance--  
Measurement

I. Myasnikov, I. A.

II. ATS-77N48R

III. Associated Technical  
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ATS/RT-3041

Office of Technical Services

(Physics--Solid State, TT, v. 5, no. 8)

KINETICS OF the Vapor Phase Hydration of  
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SLA 60-14.115

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(DC-3518).

Isotopic Oxygen Exchange Between Water and Carbon  
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SEA 60-31171  
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Sci - Phys, Chem  
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S-74/60

(NY-1551)

The Concentration of the Heavy Isotopes of Carbon  
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Sci - Chem

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ATS RJ-1890

Sci - Chem

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